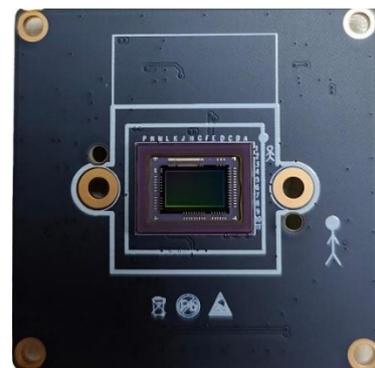
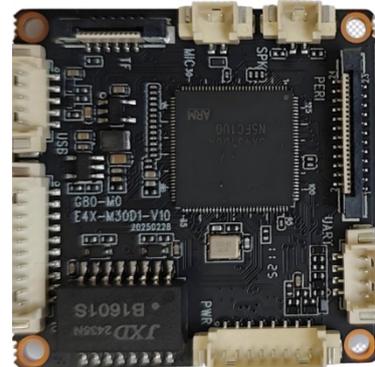




# E7880G-M0-15

## Features

- 1/2.7" 8MP CMOS
- H.265+, H.265/H.264, dual stream
- Supports HDR, backlight compensation, highlight compensation, and 3D digital noise reduction
- Supports image flip, mirror, and rotation
- Supports dual light and smart dimming
- Supports external TF card, WiFi
- Supports 1 serial port, 1 I/O input, and 1 I/O out, expandable to multiple channel
- Supports accurate human detection and vehicle detection; Applicable to scenarios including electronic fence, intrusion detection and on-duty detection etc.
- Supports privacy mask
- Supports voice intercom, voice broadcast, custom voice
- ONVIF Profile S, T, G, M
- Plug-in free for mainstream browsers
- Supports Browser-based Mesh CMS



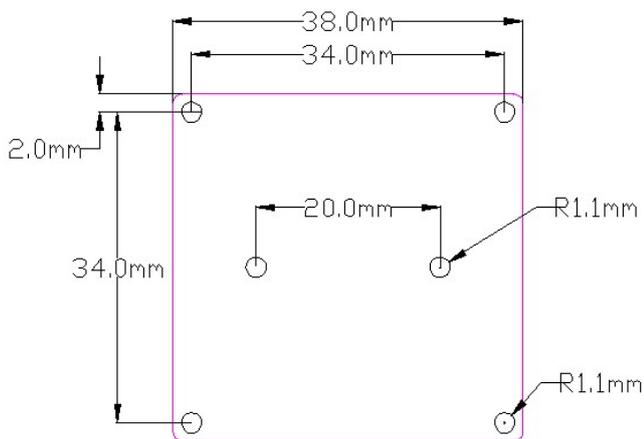
## Specifications

<b>Model</b>	E7880G-M0-15
<b>Main Chip</b>	37X, built-in 1T computing power
<b>Image Sensor</b>	8MP, 1/2.7" CMOS
<b>Image Output</b>	Main stream 30FPS (3840*2160, 2560*1440, 2304*1296, 1920*1080, 1280*720)
	Sub stream 30FPS (640*360, 352*240)
	Image effects: Auto white balance, digital wide dynamic range, backlight compensation, and adjustable hue/brightness/contrast/saturation/sharpness
<b>Audio</b>	Standard: 1-channel Line In input, 1-channel built-in amplifier output (8Ω 1W/4Ω 2W)



	G. 711 codec; supports two-way audio intercom, audio-video synchronization, and echo cancellation
<b>Network</b>	1 x RJ45 10/100 M self-adaptive Ethernet port
<b>TF</b>	1× TF card slot, supports up to 512 GB
<b>WIFI</b>	Supports Wi-Fi 4/6(On-Board Not Equipped), dual-band, 802.11b/g/n/ax
<b>Reset Key</b>	Supports hardware reset
<b>Indicator</b>	Supports network connection status LED
<b>IO Input/Output</b>	1 x Input, 1 x Output, expandable to multiple channels
<b>Network Protocols</b>	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, IPv4, IPv6, UDP, SSL/TLS, SNMP, ARP, WebSocket, ONVIF
<b>Standard</b>	Human & vehicle classification (including non-motor vehicles), boundary detection, intrusion detection, region entering detection, region exiting detection and sound alarm linkage
<b>Optional</b>	Face capture, face recognition, pet detection, lane violation control, license plate recognition, baby detection, abnormal sound detection, occlusion detection, electronic fence, off-post detection, people counting, custom voice alarm
<b>Power Supply</b>	DC 12V
<b>Operating Conditions</b>	-30°C~+65°C (-22° F to +149° F), ≤95%RH
<b>Dimension</b>	Dual boards: 38 x 38 mm, board thickness 1.6 mm

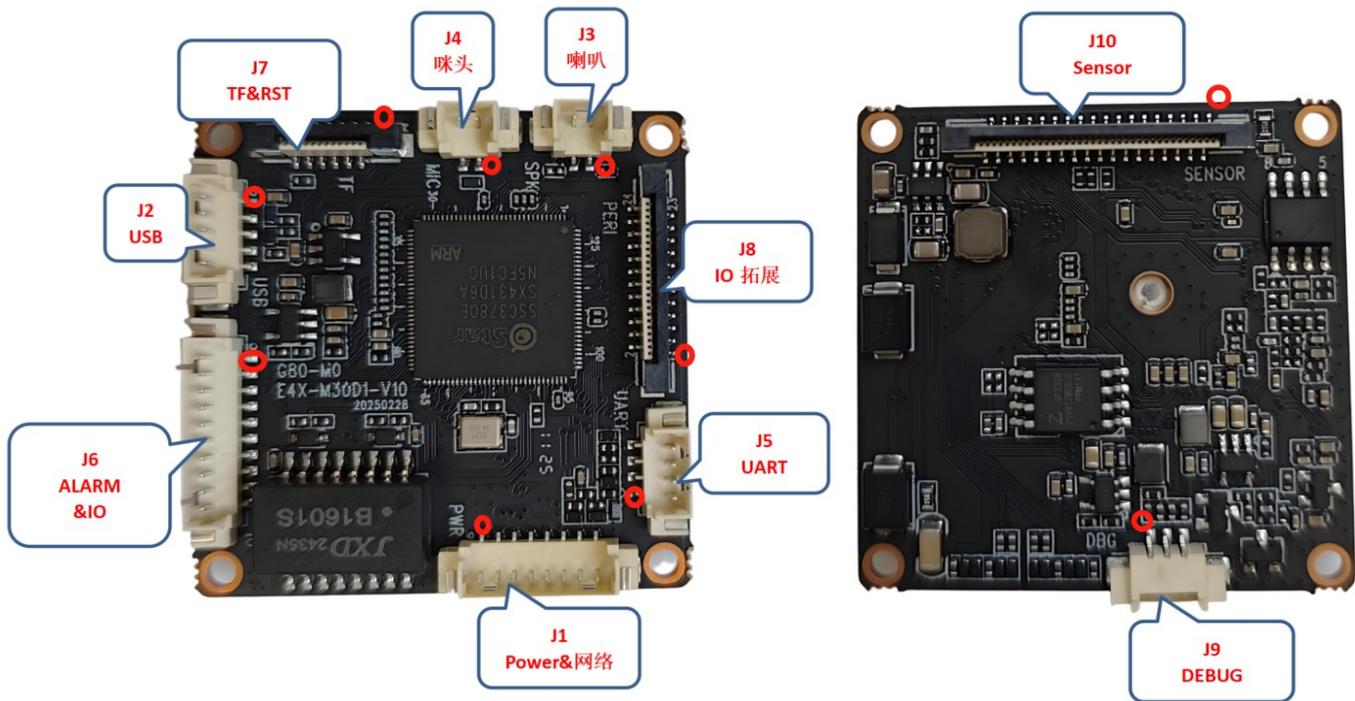
## Board Size



TOP



# Main Board



---Note:The circle point to pin 1

## Interface Descriptions

J1 (Vertical SMT-8P-1.25MM) -----12V Power and Network Interface

Pin	Name	Function
1	12V_VIN	DC 12V IN
2	GND	GND
3	RX-	Network Differential Receive Signal 6
4	RX+	Network Differential Receive Signal 3
5	TX-	Network Differential Transmit Signal 2
6	TX+	Network Differential Transmit Signal 1
7	LED_LINK	Network Link LED
8	RST	Hardware Reset (like J7.11)

J2 (Vertical SMT-5P-1.25MM) -----USB Interface

Pin	Name	Function
1	3V3	3.3V Power Output
2	USB_DM	USB Differential Data -
3	USB_DP	USB Differential Data +
4	GND	GND
5	WIFI_EN	Wi-Fi Power Enable

J3 (Vertical SMT-2P-1.25MM) ----**Speaker Interface**

Pin	Name	Function
1	SPK+	Speaker+(8 Ω 1W)
2	SPK-	Speaker- (8 Ω 1W)

J4 (Vertical SMT-2P-1.25MM) ----**MIC0 Interface**

Pin	Name	Function
1	MIC0	MIC0 Input
2	GND	GND

J5 (Vertical SMT-4P-1.25MM) ----**Serial Port Interface**

Pin	Name	Function
1	TX1	UART TX1
2	RX1	UART RX1
3	GND	GND
4	GPIO55/SPK_EN	GP1055, Reserved

J6 (Vertical SMT-10P-1.25MM) ----**Alarm Interface**

Pin	Name	Function
1	3V3_NORMAL	3.3V Output
2	FTX	FUART Transmit
3	FRX	FUART Transmit
4	ALARM_IN1	Alarm Input 1, Active Low for Alarm
5	ALARM_IN2	Alarm Input 2, Active Low for Alarm
6	ALARM_OUT1	Alarm Output 1, Active High for Alarm
7	ALARM_OUT2	Alarm Output 2, Active High for Alarm
8	ALARM_IN0	Alarm Input 0, Active Low for Alarm
9	GND	GND
10	ALARM_OUT0	Alarm Output 0, Active High for Alarm

J7 (2\*6PVertical Dual Row FPC) ----**TF Card Slot RESET**

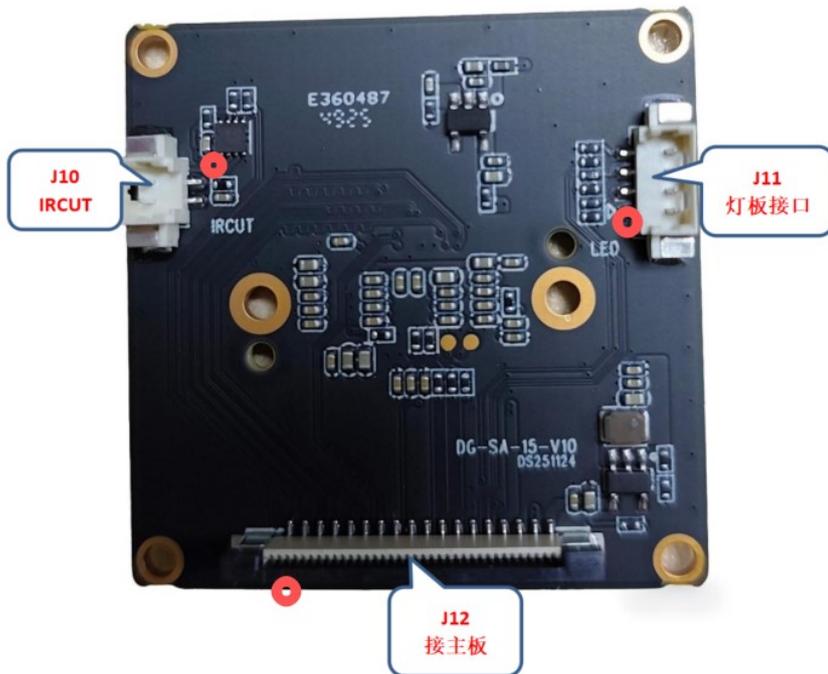
Pin	Name	Function
1	GND	GND
2	SD_DATA2	TF Card Data 2
3	SD_DATA3	TF Card Data 3
4	SD_CMD	TF Card Command
5	SD_3V3	TF Card Power Supply
6	SD_CLK	TF Card Clock
7	GND	GND
8	SD_DATA0	TF Card Data 0
9	SD_DATA1	TF Card Data 1
10	SD_CDZ	
11	SW_RST	
12	GND	



J8 (2\*12P Vertical Dual Row FPC) ----IO Expansion, Contact Developer for Requirements (SPI/12C/SDIO/PWM, etc.)

J9 Debug Port: TX, RX, GND (in order)

## Sensor



---Note:The circle point to pin 1

J10 (Vertical SMT-2P-1.25MM) ----IRCUT

Pin	Name	Function
1	IRCUTA	IRC Switch +
2	IRCUTB	IRC Switch -

J11 (Vertical SMT-4P-1.25MM) ----Light Board Interface

Pin	Name	Function
1	GND	GND
2	IR_CTRL	Default NC
3	WL_CTRL	White Light Enable, Active High, PWM Supported
4	ADC_DET	Photosensitive Detection (CDS, 3.3 V domain)

J12 Main board Connection